FREDERICK A. MONETTE

Radiological Health Risk Section
Environmental Science Division
Argonne National Laboratory

Education:

M.S.	Colorado State University, Health Physics, 1990
B.A.	St. John's University, Physics, 1988

Professional Experience:

1990-Present	Environmental Systems Engineer Environmental Science Division Argonne National Laboratory

Responsibilities include developing and applying mathematical models, analytical methodologies, computational tools, and databases for radiological risk assessments, and leading and conducting studies on dispersion and transport of radioactive and hazardous materials, their associated environmental pathways, and the resulting health risks to humans. Experience in applying environmental sampling data to evaluate baseline risks and remediation alternatives.

Knowledgeable about EPA and DOE regulatory requirements and assessment methodologies for radiological health risk assessments, and NRC and DOT regulatory requirements for hazardous materials transportation. Emphasis on leading and conducting risk assessments for the transportation of radioactive materials, addressing risks to both workers and the public.

Recent projects have included acting as document manager for an environmental impact statement addressing the management of depleted uranium hexafluoride; coordinating the production of a DOE resource handbook on transportation risk assessment; and participating in the DOE Highly Enriched Uranium Transparency Program, which involves spending significant time monitoring the blending of weapons grade uranium to low enriched uranium at several Russian nuclear production facilities.

Summary of Previous Experience:

1989	Graduate Student Intern, Dames and Moore West Valley Demonstration Project, West Valley, New York

Assisted in the site-wide environmental monitoring program, including sample collection, preparation, analysis, and interpretation at the DOE's West Valley Demonstration Project. Developed familiarity with sample design, instrumentation, laboratory procedures, worker protection measures, and engineering safeguards.

1988-1990 DOE Health Physics/Nuclear Engineering Fellow
Department of Radiology and Radiation Biology,
Colorado State University
Ft. Collins, CO

Completed thesis research by studying environmental influences upon radon-222 transport mechanisms from soil to sub-surface structures. Served as teaching/research assistant in the Department of Radiology and Radiation Biology.

Research Interests:

Developing and improving approaches for assessing health risks from exposure to radiation and radioactive materials, including sensitivity and uncertainty analyses.

Professional Activities:

Health Physics Society
Midwest Chapter of the Health Physics Society
Chicago Chapter of the Society for Risk Assessment

Clearance:

DOE "Q" clearance.

Publications:

Author or co-author of 20+ journal, report, and conference publications and presentations.